

**CLAIMS:**

1. Apparatus for use in making a purchase decision regarding purchase of a plurality of units of a good or service from a plurality of potential suppliers at a plurality of purchasing times within a purchase period, the apparatus comprising means for determining, estimating or otherwise obtaining one or more outcomes for each of said purchasing times, each outcome being defined in terms of a quantity of units of said good or service potentially or actually required to be purchased at a respective purchasing time and/or a predicted price of said good or service at a respective purchasing time, means for accessing details of terms under which said good or service may be purchased from each of said potential suppliers during said purchase period, and means for determining an optimal purchase strategy regarding purchase of said good or service during said purchase period, said optimal purchase strategy being defined in terms of, for each outcome, an allocation among said plurality of potential suppliers of a quantity of said good or service actually or expected to be required to be purchased in the event of said outcome, so as to minimise a total predicted cost of purchasing said good or service during said purchase period.
2. Apparatus according to claim 1, wherein said terms under which said good or service may be purchased from each of the potential suppliers during said purchase period include any discount offered if a quantity of units of the good or service purchase exceeds a predetermined level.
3. Apparatus according to claim 1 or claim 2, wherein said terms include any penalty which may be incurred if a quantity of units of the good or service purchased during said purchase period is less than a preset minimum.

4. Apparatus according to any one of the preceding claims, wherein a total quantity of units of said good or service expected to be required to be purchased at one or more purchasing times within said purchase period is estimated by means of a probability function.
5. Apparatus according to claim 4, wherein said probability function is based on one or more quantities of the good or service purchased at respective previous purchasing times.
6. Apparatus according to any one of the preceding claims, wherein said predicted price fluctuations are estimated by means of a probability function.
7. Apparatus according to claim 6, wherein said probability function is based on one or more prices or price variations at respective previous purchasing times.
8. Apparatus according to any one of the preceding claims, arranged to calculate a minimum expected cost of future purchasing of the good or service within said purchase period.
9. Apparatus according to claim 8, wherein said expected cost of future purchasing of the good or service is calculated by calculating the expected cost of purchasing in respect of each outcome relating to the or each purchasing time within said period.
10. Apparatus according to claim 8 or claim 9, wherein said minimum expected purchasing cost is calculated taking into account discounts offered by one or more suppliers for single orders of the good or service consisting of a quantity of units greater than a predetermined level, discounts offered by one or more of the suppliers for cumulative orders of the good or service greater than a predetermined level, and penalties applied by one or more of the suppliers in the event that the quantity of the good or service purchased during the contract period is less than a pre-set minimum.

11. Apparatus according to any one of claims 8 to 10, wherein said minimum expected purchasing cost is calculated taking into account shipping costs in respect of each potential supplier.
12. Apparatus according to claim 11, wherein said shipping costs are modelled as a constant per unit of said good or service.
13. Apparatus for use in making a purchase decision, the apparatus being substantially as herein described with reference to the accompanying drawings.
14. A method for use in making a purchase decision regarding purchase of a plurality of units of a good or service from a plurality of potential suppliers at a plurality of purchasing times within a purchase period, the method comprising the steps of determining, estimating or otherwise obtaining one or more outcomes for each of said purchasing times, each outcome being defined in terms of a quantity of units of said good or service potentially or actually required to be purchased at a respective purchasing time and/or a predicted price of said good or service at a respective purchasing time, accessing details of terms under which said good or service may be purchased from each of said potential suppliers during said purchase period, and determining an optimal purchase strategy regarding purchase of said good or service during said purchase period said optimal purchase strategy being defined in terms of, for each outcome, an allocation among said plurality of potential suppliers of a quantity of said good or service actually or expected to be required to be purchased in the event of said outcome, so as to minimise a total predicted cost of purchasing said good or service during said purchase period.
15. A method according to claim 14, wherein said terms under which said good or service may be purchased from each of the potential suppliers during said purchase period include any discount offered if a quantity of units of the good or service purchase exceeds a predetermined level.

16. A method according to claim 14 or claim 15, wherein said terms include any penalty which may be incurred if a quantity of units of the good or service purchased during said purchase period is less than a preset minimum.
17. A method according to any one of claims 14 to 16, wherein a total quantity of units of said good or service expected to be required to be purchased at said one or more future purchasing times within said purchase period is estimated by means of a probability function.
18. A method according to claim 17, wherein said probability function is based on one or more quantities of the good or service purchased at respective previous purchasing times.
19. A method according to any one of claims 14 to 18, wherein said predicted price fluctuations are estimated by means of a probability function.
20. A method according to claim 19, wherein said probability function is based on one or more prices or price variations at respective previous purchasing times.
21. A method according to any one of claims 14 to 20, including the step of calculating a minimum expected cost of future purchasing of the good or service within said purchase period.
22. A method according to claim 21, wherein said expected cost of future purchasing of the good or service is calculated by calculating the expected cost of purchasing in respect of each outcome relating to the or each purchasing time within said purchase period.
23. A method according to claim 21 or claim 22, wherein said minimum expected purchasing cost is calculated taking into account discounts offered by one or more suppliers for single orders of the good or service consisting of a quantity of units greater than a predetermined level, discounts offered by one or more of the suppliers for cumulative orders of the good or service greater than a predetermined level, and

penalties applied by one or more of the suppliers in the event that the quantity of the good or service purchased during said purchase period is less than a pre-set minimum.

24. A method according to any one of claims 21 to 23, wherein said minimum expected purchasing cost is calculated taking into account shipping costs in respect of each potential supplier.
25. A method according to claim 24, wherein said shipping costs are modelled as a constant per unit of said good or service.
26. A method for use in making a purchase decision, the method being substantially as herein described with reference to the accompanying drawings.